

NOTES ON BIRDS COLLECTED BY DR. W. L. ABBOTT ON PULO TAYA, BERHALA STRAIT, SOUTHEASTERN SUMATRA.

By HARRY C. OBERHOLSER.

Of the Biological Survey, United States Department of Agriculture.

Pulo Taya, or the island of Taya,¹ as it is sometimes called, is situated at the eastern end of Berhala Strait. This makes it about 30 miles south of the eastern end of Lingga Island, about the same distance southeast of Singkap Island, and slightly farther from Cape Bon, the nearest point on the southeastern coast of Sumatra. The island is oval in shape, about one and one-half miles in length from north to south, by three-quarters of a mile in width; is of granitic formation; and has some coral reefs. The shore is steep, and a double peak rises inland to a height of 630 feet. There is an excellent spring on the western side. Pulo Taya is uninhabited, but fishermen from Singkap Island visit it to snare the Nicobar pigeons. It is wholly forested, and birds seem to be fairly numerous, though of few species. The presence of a few rats and squirrels is reported by natives of neighboring islands.

Two small islands, the Nyamok Islets, lie about a mile off the northern end of Pulo Taya. The larger of these is only some 200 or 300 yards long, and about 10 acres in extent; and neither is over 150 feet high. They support a thin growth of jungle, but their bird life, so far as observed by Dr. W. L. Abbott, is, except for *Caloenas nicobarica*, almost negligible. Because of their close proximity these islets are included in the present paper on the avifauna of Pulo Taya.

Doctor Abbott visited Pulo Taya and the Nyamok Islets from July 26 to July 28, 1899. His collection of birds, which, as usual, he presented to the United States National Museum, numbered 30 specimens, two of which, sunbirds, have subsequently disappeared. The remaining 28 represent 8 species, and include three new subspecies, two of which, herewith described, are apparently endemic. The other, of wider geographic range, has already been named in another paper.² In addition to the birds collected by Doctor Abbott, there are included in the following list two species, designated by

¹ Saja Island of some maps.

² *Sauropatis chloris cyanescens* Oberholser, Proc. U. S. Nat. Mus., vol. 52, February 8, 1917, p. 189 (Pulo Taya, off the southeastern coast of Sumatra).

an asterisk (one of them on only the Nyamok Islets), which were merely seen. Aside from the two endemic forms, the known avifauna of Pulo Taya appears not to differ from that of Lingga and other neighboring islands.

Doctor Abbott, accompanied by Mr. C. Boden Kloss, was apparently the first ornithologist to examine Pulo Taya. References in literature to its birds, therefore, are confined to papers mentioning the results of this expedition.

Mr. Kloss has published a popular account of the trip,¹ in which he mentions some birds; and the present writer has described a subspecies of *Sauropatis chloris* from Pulo Taya specimens.²

I am indebted to Doctor Abbott for physiographical and other notes concerning the islands here treated; and to Dr. C. W. Richmond for other assistance.

Measurements in this paper are all given in millimeters, and have been taken as explained in the author's paper on *Butorides virescens*.³ The names of colors are from Mr. Robert Ridgway's recently (1913) published Color Standards and Color Nomenclature. The locality of all specimens hereinafter treated should be understood as Pulo Taya unless otherwise stated.

Family ARDEIDAE.

*DEMIGRETTA SACRA SACRA (Gmelin).⁴

[*Ardea*] *sacra* GMELIN, Syst. Nat., vol. 1, pt. 2, 1789, p. 640 (Tahiti Island, Society Islands).

A pair was seen on the Nyamok islets.

Family PANDIONIDAE.

*POLIOAETUS ICHTHYAETUS (Horsfield).

Falco Ichthyatus HORSFIELD, Trans. Linn. Soc. Lond., vol. 13, May, 1821, p. 136 (Java).

One fish eagle, without much doubt this species, was seen on Pulo Taya by Doctor Abbott.

Family LARIDAE.

STERNA MELANAUCHEN MELANAUCHEN Temminck.

Sterna melanauchen TEMMINCK, Nouv. Rec. Planch. Col. d'Ois., vol. 5, livr. 72, 1827, pl. 427 and text (coast of Celebes).

Three specimens, from Pulo Taya, where Doctor Abbott reports the species "pretty common." They are all adults, with some of the wing-quills in process of molt. Concerning the females, Doctor

¹ Journ. Straits Branch Roy. Asiatic Soc., No. 41, January, 1904, pp. 58-59.

² *Sauropatis chloris cyanesceus* Oberholser, Proc. U. S. Nat. Mus., vol. 52, February S. 1917, p. 189.

³ Proc. U. S. Nat. Mus., vol. 42, 1912, p. 533.

⁴ Species designated by an asterisk are not represented by specimens.

Abbott says: "Iris dark brown; feet dark brown; bill black; extreme tip white." In size and color these birds agree with those from the Philippine Islands and China. They measure as follows:

Measurements of specimens of Sterna melanauchen melanauchen.

U.S.N.M. No.	Sex.	Locality.	Date.	Collector.	Total length. ^a	Wing.	Tail.	Exposed culmen.	Bill from gape.	Tarsus.
170820	Male..	Pulo Taya....	1899. July 28	Dr. W. L. Abbott.	mm. 355.6	mm. 229	mm. 150	mm. 35	mm. 47	mm. 20
170821	Female	do.....	do.....	do.....	330.2		129	33	42	18
170822	Female	do.....	do.....	do.....	342.9		136.5	33.7	44.5	18.5

^a Measured in the flesh by the collector.

STERNA ANAETHETA ANAETHETA Scopoli.

Sterna anacthctus SCOPOLI, Del. Flor. et Faun. Insubr., pt. 2, 1786, p. 92 (Panay Island, Philippine Islands).

One adult female of this species, No. 170819, U.S.N.M., is in the collection, taken on July 26, 1899. Length in flesh, 394 mm. "Bill and feet black; iris dark brown." It is identical with examples from the Tambelan Islands. Doctor Abbott mentions that this bird had a tumor on the angle of its jaw.

Family CLARAVIIDAE.

CALOENAS NICOBARICA (Linnaeus).

[*Columbia*] *nicobarica* LINNAEUS, Syst. Nat., ed. 10, vol. 1, 1758, p. 164 (Nicobar Islands, Bay of Bengal).

Five specimens:

Adult female, No. 170827, U.S.N.M., Pulo Taya, July 28, 1899. Length in flesh, 368.5 mm. "Iris brownish gray; bill and cere dull black; feet livid purple, claws yellow."

Juvenal female, No. 170830, U.S.N.M.; Pulo Taya, July 28, 1899. Length in flesh, 355.5 mm. "Middle of bill leaden, base and cere and tip black; feet dark brown, claws pale brown."

Adult male, No. 170828, U.S.N.M.; Pulo Taya (obtained in captivity on Lingga Island, July 24, 1899). Length in flesh, 368.5 mm. "Iris dark gray; bill and cere dull black; feet dark purple, soles yellow."

Adult female, No. 170831, U.S.N.M.; Pulo Taya (obtained in captivity on Lingga Island, July 24, 1899). Length in flesh, 355.5 mm. "Bill and cere dull black; feet dark purple; soles yellow."

Adult female, No. 170829, U.S.N.M.; Pulo Taya (bought in captivity on Lingga Island, July 21, 1899). Length in flesh, 355.5 mm. "Iris dark gray; bill and cere bluish black; legs livid purple; soles yellowish."

The juvenal female differs from the adult in its much more bronzy interscapulum; rudimentary hackles on the hind neck; duller posterior upper parts and wings; much duller, more bronzy lower surface; and lack of hackles on the foreneck.

Doctor Abbott reported having seen a few Nicobar pigeons on Pulo Taya, but many more on the Nyamok Islets.

Family COLUMBIDAE.

COLUMBA ARGENTINA Bonaparte.

[*Myristicivora*] *grisea* BONAPARTE, Consp. Gen. Avium, vol. 2, 1854, p. 36 (Gray MS.) (Indian Archipelago).

Columba argentina BONAPARTE, Consp. Gen. Avium, vol. 2, 1854, p. 36 (Temminck MS.) (substitute name for *Myristicivora grisea* Bonaparte [in synonymy]).

Columba phasma RICHMOND, Proc. U. S. Nat. Mus., vol. 26, February 4, 1903, p. 490 (new name for *Myristicivora grisea* Bonaparte, not *Columba grisea* Bonnaterre 1790).

A single adult female of this rare pigeon was obtained by Doctor Abbott on Pulo Taya, July 27, 1899. The colors of the soft parts are given as follows: "Iris pink; feet pale purple; bill greenish horny at tip; base and cere dull brownish purple." Length in flesh, 406.5 mm. The plumage, both above and below, is somewhat adventitiously stained with brownish.

Dr. Charles W. Richmond some time ago called attention to the preoccupation of the name *Columba grisea* as used for this species, and proposed *Columba phasma* in its place.¹ Unfortunately, however, the term *Columba argentina* (a manuscript name from Temminck), inserted tentatively by Bonaparte as a synonym of his *Myristicivora grisea*,² becomes thus a substitute name for the latter. Since, therefore, the specific name *grisea* can not be used in the genus *Columba*, on account of the previous *Columba grisea* Bonnaterre,³ for a South American species of *Chaemepelia*, the bird heretofore called *Columba grisea* (Bonaparte) must now be known as *Columba argentina* Bonaparte.

This species was first named *Carpophaga grisea* by G. R. Gray,⁴ from a specimen in the British Museum collected in the "Indian Archipelago." This example is now preserved in the British Museum, and should be considered, as already done by Count Salvadori,⁵ the type of Bonaparte's name *Myristicivora grisea*, and hence of the species, since both the two other names applied to this pigeon, *Columba argentina* Bonaparte and *Columba phasma* Richmond, must be treated as merely substitute terms. The type-locality of the species is consequently the Indian Archipelago.

¹ Proc. U. S. Nat. Mus., vol. 26, February 4, 1903, p. 490.

² Consp. Gen. Avium, vol. 2, 1854, p. 36.

³ Encyl. Méth., pt. 1, 1792, p. 252 (Cayenne).

⁴ List Spec. Birds Coll. Brit. Mus., pt. 3, Gallinae and Anseres, 1844, p. 5 (*nomen nudum*).

⁵ Cat. Birds Brit. Mus., vol. 21, 1893, p. 249.

Family TRERONIDAE.

MYRISTICIVORA BICOLOR (Scopoli).

Columba bicolor Scopoli, Del. Flor. et Faun. Insubr., pt. 2, 1786, p. 94 (New Guinea).

Four specimens:

Adult female, No. 170823, U.S.N.M.; Pulo Taya, July 27, 1899.

Adult female, No. 170824, U.S.N.M.; Pulo Taya, July 27, 1899.

"Iris dark brown; bill leaden blue, black at tip; feet pale blue."

Adult female, No. 170825, U.S.N.M.; Pulo Taya, July 27, 1899.

"Bill leaden blue, black [at] tip; feet light blue; claws black."

Adult female, No. 170826, U.S.N.M.; Pulo Taya, July 27, 1899.

"Iris dark brown; eyelids leaden."

All these examples, as is so frequently the case with this species, are more or less adventitiously stained, apparently by fruit juices, about the head, and some of them also on the under parts. They apparently do not differ in either color or size from specimens of this species taken in other localities. Doctor Abbott found this pigeon numerous on Pulo Taya. Measurements of the specimens collected are given herewith:

Measurements of specimens of Myristicivora bicolor.

U.S.N.M. No.	Sex.	Locality.	Date.	Collector.	Total length. ^a	Wing.	Tail.	Exposed culmen.	Height of bill at base.	Tarsus.	Middle toe without claw.
170823	Female	Pulo Taya....	1899. July 27	Dr. W. L. Abbott.	mm. 381	mm. 222	mm. 121	mm. 24.5	mm. 8	mm. 29	mm. 34.5
170824	...do...	...do.....	...do....	...do.....	375	221	116.5	20.5	7	29	32.5
170825	...do...	...do.....	...do....	...do.....	381	222	127	22.5	8.5	29	32.5
170826	...do...	...do.....	...do....	...do.....	387	219	117	24	9	31	34

^a Measured in the flesh by the collector.

Family ALCEDINIDAE.

SAUROPATIS CHLORIS CYANESCENS Oberholser.

Sauropatis chloris cyanescens OBERHOLSER, Proc. U. S. Nat. Mus., vol. 52, February 8, 1917, p. 189 (Pulo Taya, off the southeastern coast of Sumatra).

Four specimens:

Adult male, No. 170835, U.S.N.M., type of subspecies; July 28, 1899. Length in flesh, 260 mm.

Adult female, No. 170836, U.S.N.M.; July 28, 1899. Length in flesh, 270 mm. "Iris dark brown; bill black, white beneath at base; claws black."

Adult female, No. 170833, U.S.N.M.; July 27, 1899. Length in flesh, 273 mm. "Iris dark brown; bill black, fleshy white beneath at base; feet dark brown, soles pale."

Adult female, No. 170834, U.S.N.M.; July 28, 1899. "Iris dark brown; bill black, white beneath at base."

One of these (No. 170836, U.S.N.M., July 28, 1899) is just beginning to show molt in the wings and tail.

According to Doctor Abbott this kingfisher was fairly common on Pulo Taya; and Mr. Kloss reported it from the Nyamok Islets.¹

Family GRACULIDAE.

LAMPROCORAX PANAYENSIS RICHMONDI, new subspecies.²

Subspecific characters.—Resembling *Lamprocorax panayensis strigatus*, from Java, but decidedly larger; green of particularly the lower parts more bronzy or yellowish (less bluish).

Description.—Type, adult male, No. 170841, U.S.N.M.; Pulo Taya, July 27, 1899; Dr. W. L. Abbott. Upper and lower parts shining metallic yew green, the former with a very slight, the latter with a very decided, purplish bronzy sheen; tail browish black, the three middle pairs of rectrices and broad exterior margins of the rest, metallic dull blue green; wings brownish black, the inner edges of the quills paler and more brownish, both webs of tertials, with outer webs of primaries and secondaries, metallic dull blue green; greater wing-coverts metallic dusky yellowish green; median and lesser wing-coverts like the back; under wing-coverts fuscous black edged with metallic dull bluish green.

This new race is decidedly larger than Malay Peninsula specimens of *Lamprocorax panayensis affinis*, especially in the bill, and is usually more bronzy below. It is, in fact, most closely related to *Lamprocorax panayensis heterochlorus*³ of the Anamba Islands, but is separable by its smaller size, particularly shorter tail, and by its more bronzy plumage, especially below. So far as known, it is confined to Pulo Taya.

The reasons for the recognition of the genus *Lamprocorax* as distinct from *Aplonis* have already been set forth by the present writer.⁴

Doctor Abbott reported *Lamprocorax panayensis richmondi* fairly common on Pulo Taya at the time of his visit, and collected six specimens there, as follows:

Adult male, type, No. 170841, U.S.N.M., July 27, 1899.

Adult male, No. 170837, U.S.N.M.; July 26, 1899. "Iris red; bill and feet black."

¹ Journ. Straits Branch Roy. Asiatic Soc., No. 41, January, 1904, p. 59.

² Named in honor of Dr. C. W. Richmond, who first discovered its distinctness.

³ *Lamprocorax panayensis heterochlorus* Oberholser, Bull. U. S. Nat. Mus., No. 98, June 30, 1917, p. 57.

⁴ Bull. U. S. Nat. Mus., No. 98, June 30, 1917, p. 58.

Juvenal male, No. 170838, U.S.N.M.; July 26, 1899. Length in flesh, 216 mm.

Juvenal female, No. 170839, U.S.N.M.; July 26, 1899. Length in flesh, 203 mm. "Iris red; bill and feet black."

Juvenal female, No. 170840, U.S.N.M.; July 27, 1899. Length in flesh, 203 mm.

Juvenal female, No. 170842, U.S.N.M.; July 27, 1899. Length in flesh, 203 mm.

Two of the juvenal females (Nos. 170839 and 170842, U.S.N.M.) are just beginning to molt; the two other juvenal birds are in the midst of the process, this affecting both quills and contour feathers, and have acquired a considerable portion of their adult livery. Measurements of the two adults are as follows:

Measurements of specimens of Lamprocorax panayensis richmondi.

U.S.N.M. No.	Sex.	Locality.	Date.	Collector.	Total length. ^a	Wing.	Tail.	Exposed culmen.	Height of bill at base.	Tarsus.	Middle toe without claw.
170841	Male.	Pulo Taya ^b . . .	1899. July 27	Dr. W. L. Abbott.	mm.	mm. 108	mm. 69	mm. 18.5	mm. 7.5	mm. 22	mm. 18.5
170837	..do..	do.....	July 26	do.....	222	107	69	18	7.5	22	19.5

^a Measured in the flesh by the collector.

^b Type.

Family NECTARINIIDAE.

CINNYRIS ORNATA MICROLEUCA, new subspecies.

Subspecific characters.—Similar to *Cinnyris ornata ornata* (= *Cinnyris pectoralis* [Horsfield])¹ from Java, but decidedly larger; male with upper parts less golden (more grayish or brownish); posterior lower surface averaging paler; outer pair of rectrices with smaller white tips. Female also less golden (more grayish or brownish) above than the same sex of *Cinnyris ornata ornata*, with posterior lower parts averaging somewhat paler, and the outer rectrices with less white on their tips.

Description.—Type, adult male, No. 170843, U.S.N.M.; Pulo Taya, off the southeastern coast of Sumatra, July 26, 1899; Dr. W. L. Abbott. Sinciput metallic dusky violet blue; rest of upper surface citrine, the rump and upper tail-coverts more yellowish; tail brownish black, the three outer rectrices tipped with white, most broadly on the outermost; wings fuscous, the quills and all the coverts, ex-

¹ For this change of name, see Oberholser, Smithsonian. Misc. Coll., vol. 60, No. 7, October 26, 1912, p. 18.

cept the primary series, narrowly margined externally with citrine; center of chin, throat, and jugulum, raisin black; sides of chin, throat, and jugulum, with lores and anterior part of cheeks, metallic indigo blue; remainder of sides of head and sides of neck, citrine; a narrow somewhat broken line across the breast at the posterior edge of the raisin black jugulum, prout's brown; pectoral tufts cadmium yellow; breast and abdomen, chrome yellow; lower tail-coverts between wax yellow and primuline yellow; sides of body and thighs wax yellow; lining of wing white washed with baryta yellow; "bill and feet black."

Of the three adult males from Pulo Taya, the one chosen as the type is somewhat the dullest and least golden above; otherwise the individual difference is but slight. Doctor Abbott says that the species was tolerably common on Pulo Taya, where it frequents the jungle. So far as known, this new subspecies is confined to this island. Measurements of four adults are as follows:

Measurements of specimens of Cinnyris ornata microleuca.

U.S.N.M. No.	Sex.	Locality.	Date.	Collector.	Total length. ^a	Wing.	Tail.	Exposed culmen.	Tarsus.	Middle toe without claw.
170843	Male..	Pulo Taya ^b ..	1899. July 26	Dr. W. L. Abbott.	mm. 114	mm. 54	mm. 31.5	mm. 17	mm. 14.5	mm. 9.5
170844	...do...	do.....	July 27	do.....	121	54	34		14	9.5
170848	...do...	do.....	July 28	do.....	108	54.5	32.5	18	14.5	8
170845	Female	do.....	July 27	do.....	108	48.5	31	16.5	13.5	9

^a Measured in the flesh by the collector.

^b Type.